Claims

What is claimed is:

1. A remote video surveillance server comprising:

A number of channel interface units [1] directed to field terminals for receiving video, audio and alarm signals in a surveillance site from said field terminals and transmitting the video, the audio and control information from view stations to said field terminals respectively, wherein one of said channel interface units comprises:

a) a number of channel transceiver chips to communicate with said field terminals, connected to a logic control module through a data line and a clock line, for transmitting/receiving signals from a channel;

b) a logic control module including a number of programmable devices, a single chip processor and a memory for receiving data from said channel transceiver chips through the data line and the clock line and transmitting the data to said channel transceiver chips, moreover, for receiving the data from the bus control module through the data line and the address line and transmitting the data to the bus control module, wherein said memory is connected to said programmable devices for buffering the data received from said channel transceiver and the data received from said bus control module; and

c) a bus control module with one end connected to said logic control module and another end connected to a computer bus;

an information process kernel [2] including a computer and a software

module and connected to said channel interface unit directed to said field terminal [1] by said computer bus; and

a number of view station interface units [3] connected to said information process kernel by said computer bus.

2. The remote video surveillance server in accordance with claim 1, wherein one of said channel interface units comprises:

two channel transceiver chips [a] and [b],

programmable devices [a], [b], [c] and [d],

the memory devices [a] and [b], and

a single chip processor, wherein said channel transceiver chips [a] and [b] are connected to said programmable devices [a] and [d] respectively through the transmitting clock line Tck, transmitting data line TxD and receiving clock line Rck, receiving data line RxD, said programmable devices [a] and [b] are connected to said memory devices [a] and [b] respectively through the DATA BUS and the AD BUS, said memory devices [a] and [b] are connected to said programmable devices [b] and [c] respectively through the DATA BUS and the AD BUS , said programmable devices [b] and [c] are connected to the I/O bus in said single chip processor (CPU), and also connected to the DATA BUS and the AD BUS in a computer bus control chip, said single chip processor (CPU) is connected to the control bus and the status bus in said computer bus control chip through its I/O bus, and said computer bus control chip is connected to said computer bus.

3. The remote video surveillance server in accordance with claim 1 or 2, wherein said channel transceiver chip is an E1 or a DDN or an ISDN transceiver chip,